My Operative Experience In "Pus Cases."

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BY
I. S. STONE, M.D.,
SURGEON TO COLUMBIA HOSPITAL, WASHINGTON, D. C.

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MY OPERATIVE EXPERIENCE IN "PUS CASES."

BY I. S. STONE, M.D.,
SURGEON TO COLUMBIA HOSPITAL, WASHINGTON, D. C.

The following brief recital of a personal experience includes only cases selected from those occurring in my service at Columbia Hospital during the past year. In that time twenty-five cases have been referred to me for operation in which pus in varying amounts was found in the pelvis or abdomen. It will be therefore understood that this is not an account of my "year's work in gynecology," for I shall not mention other surgery for the present. Of these twenty-five cases three have died. But if I add to these the remainder of my pelvic cases I would have nearly fifty without added mortality. I shall limit myself to the consideration of these pus cases alone and shall not mention oöphorectomy, ovariotomy or any other surgery. The organic law of the Columbia Hospital demands that all cases requiring a laparotomy shall be submitted to a consultation of the visiting staff, composed of four surgeons, two of whom are obstetricians and two are gynecologists. It may therefore be taken for granted that only severe cases

are treated surgically and unnecessary operations are not performed.

In all of my cases a cause was clearly found for the pathological condition. In about two thirds of the cases, sepsis following abortion or delivery at term, proved the cause. The remainder were due to gonorrhœa. In all of my post puerperal cases the acute stage had passed, and it is impossible to say just how many were due to infection by gonorrhœa, or to that from other sources. One of my cases of post puerperal infection followed rupture of the uterus after labor or during the after treatment. Five cases were the victims of puerperal septicæmia continuing for four, five, and in one case eight months, following delivery at term. These women looked like victims of phthisis, or malignant disease. Six cases had pelvic abscesses of all sizes to a quart of pus following upon gonorrhœa for from one to twelve or more months.

One of the most interesting cases was the result of specific infection of a bicornate uterus.

Clinical History.—The account given by the patient of her suffering, is generally sufficient to indicate suppuration within the pelvis. They tell of pain, peritonitis, rigors and sweats, and slow getting up after delivery. These symptoms demand that a careful pelvic examination be made which will always clear up the diagnosis. Strange enough it is, yet true, that quite a large proportion of these patients claim that they were treated for neuralgia, malaria, etc., and that no pelvic examination had been made by the attending physician.

Of all symptoms pain is the most indefinite. It is always present in varying amount, but is never a positive indication of the extent of disease. Many neurotic patients have far greater tenderness in the ovarian region, and complain more of pain than is elicited in the examination of a pelvic abscess. Neither is the temperature an indication of the extent of disease. We may see a temperature of 100° in morning and 102° in afternoon in a patient with pelvic abscess containing a pint of pus, and with extensive bowel adhesions. Per contra, a small pyosalpinx may cause a rise to 104° P.M. Some of my cases of pyosalpinx with adhesion had no rise of temperature. But we must never underestimate the important information given by the thermometer, for continued high temperature in these cases means trouble ahead for both patient and operator.

The pulse will furnish much information.

A pulse of 140 or above with a continued high temperature means an ill patient. It means a difficult and dangerous surgical operation where all the resources of the well appointed hospital, and the best surgical skill may be required to meet the many possibilities of such surgery as is necessary to save life. The information gained by the pelvic examination of these patients is final and most satisfactory as a rule. My plan is first to examine without, and afterward with, an anæsthetic. Rarely it is important to learn more than to be sure that pus is, or is not, present—or rather, is an operation demanded or not? I fail to see any benefit to be derived from nice distinctions about diagnosis. Such refinements are ab-

surd to the practical surgeon. The preparation of the patient includes tonics, laxatives and good food, cleanliness, cheerful surroundings. I prefer always to give quinine at once after admission, to watch its effect upon the temperature. Not infrequently a rise of temperature during convalescence after operation is promptly reduced by the administration of quinine, showing a malarial complication. So much has been said about expedition, and everything else a surgeon must have in mind during an operation, that I shall not refer to this part of my method or opinions. Each one has an individuality peculiar to himself and cannot be a surgeon without this *sine qua non*. Drainage is just as important as it ever was in many cases, but the glass tube reaches a limited area and I am finding great comfort and satisfaction in the use of the gauze drain. It has done good service in every case, and it is scarcely necessary to say that it is used in very severe cases.

Hæmorrhage has never been difficult to control. Every important vessel can be brought into view by means of the Trendelenburg posture, which I find very useful. Flushing the abdominal cavity is also just as beneficial as Joseph Price claims it to be. I find myself occasionally doing without it, since I use the Trendelenburg posture for difficult cases. I quite agree with those who claim that it rarely if ever does harm. It is also occasionally necessary to use aristol as suggested by Dr. Robert T. Morris of New York. After separating formidable adhesions it is very desirable to prevent the reforming of these dangerous impediments to the peristaltic action of

the intestines. Aristol may be freely sifted over these surfaces without fear of harmful result. In the after-treatment my method is to sustain all the cases of laparotomy for pelvic abscess by giving food and stimulants by rectum at once, and by the mouth just as soon as they can be borne. Patients must not be allowed to remain the usual *twenty-four hours without nourishment.*

In the treatment of nausea, if persistent, I resort to lavage in any case. It is the most potent agent for good I have ever seen tried. Of course the usual sip of hot water, and even creasote may be tried, but when these fail it seems unkind to try every drug with a reputation as a composer of sick stomachs. A clean stomach is often in my experience the fore-runner of an appetite. With soap and water for the hands, clean dressings, instruments, sutures, etc., all suppuration can generally be avoided in the abdominal wound. Chemical antiseptics, I do not find essential. The only use these agents have in my laparotomies, is where the hands of assistant or operator need to be quickly cleansed during an operation, and where the usual time and care cannot be given them. Clean boiled water is used without any chemical whatever. Suppuration may generally be avoided in all cases where the abdominal wound is not infected by pus or serum removed. The greatest care bestowed upon hands, and instruments, will not prevent infection of the wound, if fetid pus from a suppurating ermoid cyst, or even that from certain pelvic abscesses, comes in contact with it. It has never been my misfortune to have a ventral hernia follow

a laparotomy. All operations done for pelvic abscess or pyosalpinx have been completed. In one or two cases very small ovaries were not found even after careful search. They were, if present, too small to have any pus in them. No exploratory operation for pus has been undertaken by me.

The following case is reported to show how fatal an attack of gonorrhœa may prove.

Case 15.—Mrs.—— had contracted gonorrhœa from her husband and came to my office for treatment. She was at once sent to the hospital where in a short time the vaginitis was cured. But in two weeks she had cystitis, then nephritis. An ovarian abscess on left side holding a pint of pus rapidly formed. Operation was refused at first and was only done as a last resort. Patient did well for three days, then came suppression of urine, uræmia and death on fifth day. The autopsy showed a perfect condition of the pedicles and peritoneum. No peritonitis. Death due to nephritis in less than five weeks after infection from gonorrhœa.

The next case, also fatal, is cited to show how easily some patients succumb to shock. Also how sepsis following abortion may continue indefinitely and not recover.

Case 26.—Miss——, age 19, had an induced abortion one year previous to her admission to the hospital. History of pain in pelvis, gonorrhœa, inflammation of bowels, purulent vaginal discharge, large mass in right and smaller one in left ovarian region; uterus fixed and low down in the pelvis. Operation difficult, and bowel much injured in one place but returned hoping for good results. Patient did badly from the start. Bowels refused to respond to salines. Distension. Again resorted to irrigation. Pulse did not recover its tone. Death on third day. I am unable to say why this patient could not stand the shock of operation. She had the very best care during the after treatment.

The next case (No. 18), I report to show that a perfectly satisfactory operation may fail of its object, partly owing to lack of care in after treatment.

Mrs.—— had puerperal septicæmia followed in—— by a large pelvic abscess extending to umbilicus at time of sec-

tion. High temperature to 104. Pulse 130. Everything fixed in pelvis and lower abdomen. During the two weeks she remained in the hospital prior to operation she grew steadily worse and a bad result was not altogether surprising. The difficulty of the undertaking can only be known to those who have wrestled with these formidable cases. The operation required about an hour,and very much pus escaped and was washed out of the cavity. Although the operation was well done, as shown at autopsy, she had severe shock, and in absence of nurse for a few moments from the room the night after the operation, arose from her bed with the glass drainage tube in position. I consider this case a sacrifice to the unfortunate theory of some of our leading surgeons who say starve these cases for 24 hours. This patient needed food and stimulants from the start which she did not get until too late.

The next case (No. 17), in many respects like the last, only following gonorrhœa instead of puerperal septicæmia.

A woman, age—— and married, had symptoms of pelvic abscess for —— before admission to the hospital. After admission her condition grew rapidly worse and a tumor now reaching nearly to the umbilicus was of uncertain character. Her temperature and pulse gave positive evidence of the severity of the disease and of the necessity for operative treatment. I pause here to remark that to have aspirated any of these cases through the vagina, would have reached only a small area of the disease, and would have evacuated very little of the accumulated pus. In opening the abdominal cavity the omentum was, as is so often the case, adherent to everything in its reach. It was difficult to find an opening or crevice anywhere to even begin the work of separation and enucleation. Many visitors present, among others the hospital staff and Professor Lovejoy of the Georgetown Medical College, were invited to inspect the tumor after the abdomen was well opened and omentum removed,but without any definite conclusion. It is well to be frank, and hence I cheerfully admit that I was unable to say with my hands upon the mass just what was within. The separation proceeding,however, soon revealed abundant pus, which gushed out freely, and although the operation was difficult, was well done, and after much anxiety for a few days she made a perfect recovery. The temperature and pulse chart of this case is very interesting. Both were high before section, and very gradually recovered afterwards. A striking feature of these pelvic abscesses is the very sma[ll]

amount of debris found and removed. The remains of this woman's tubes and ovaries give no conception of the kind of surgery required to complete the operation.

The separation of adhesions in this case was done without tearing the bowel, and the abdominal wound healed nicely and without suppuration.

Septic Disease in Uterus Bicornus.—Another interesting case, No. 22, occurred in a young negress following gonorrhœa. When first admitted she appeared to have a fibroid tumor reaching the umbilicus, with suppurating tubes and ovaries. High temperature, quick pulse and other signs of pelvic disease present. The case was considered by the visiting staff so undesirable a subject for operation, that she was allowed to remain for several weeks under observation, during which time she gained somewhat, and a favorable time was selected after her condition had improved. The operation was nearly completed before the discovery was made that I had really removed the tube, ovary and a portion of the bicornate uterus. This was not extremely difficult save for the broad pedicle, which was very deep down in the pelvis, and so closely attached to the uterus as to cause some delay. When the left side was undertaken the real nature of the case was understood, and fortunately no serious disease existed, and operation was not required upon that side. The sac contained very thick and peculiar, ill-smelling pus. Recovery uneventful save for a slight dementia which continued a few days only, and was of the happy or ecstatic variety. She proved quite entertaining to her nurse, and discoursed tuneful melodies without number. Another interesting case recently treated deserves mention. Had septic metritis, high temperature, etc. A month or six weeks previously had child at term, followed by septicæmia. A mass in right ovarian region supposed to be Fallopian tube. Temperature 102°, pulse 120. Patient and consultant refused to assent to an operation until several weeks had passed, during which time she steadily grew worse. Operation difficult from the start. Omentum glued to everything, and dipping down over right appendages, was inserted in the wall of the uterus just above the attachment of the bladder. When scooped out, a large opening was found into the uterine cavity, through which the index finger was freely passed. Infection had entered the pelvis and abdomen through this channel. The intestines were badly torn in separating adhesions, requiring many sutures before they could be returned. I was anxious about the patient until her bowels acted, for fear that I had closed the bowels too tightly. Her convalescence was uninterrupted after her bowels acted, fifty-two hours after section. I should have

remarked that I packed this patient's pelvis with gauze, and dusted aristol over intestines where previously adherent. Gauze was used all around the uterus, for fear of infection through the uterine wound, as it could not be entirely closed with sutures, owing to the friable nature of the tissues. Still more gauze was passed down in the vicinity of the right broad ligament, where the intestines had been very adherent. The glass drain discharged but little fluid, while the gauze poured out an abundance.

These formidable cases are fortunately, as a rule, safe for full and complete recovery, after the danger incident to the operation has passed. Thus far, I have more satisfaction with this surgery than any other. It is always best to complete the work well, when once undertaken. Otherwise the old method of puncture through the vagina will be again heard from. In this connection I wish to say that I have seen at least four cases where puncture through vagina reached pus in the broad ligament, and was followed by an apparent cure. But if any practitioner will witness one of these sections, and see how perfectly thin and healthy the broad ligament remains after all adhesions and disease have been removed, he must indeed be hard to convince if he still believes in the old theory of "cellulitis" as explaining these pelvic masses.

Finally, and in conclusion, I must refer to the minor cases which have been operated upon, and which are abroad in the land by scores, without recognition. One case, No. 20. W. had been married sixteen years; one conception; pelvic disease ever since. Pain, retroflexion, sterility. Treated for months at a time by various physicians. Finally, after nearly two months more of treatment under my own supervision without result, section. Two

large pus tubes like sausages. No trouble whatever in convalescence.

Another patient (Case 12), unmarried, had gonorrhœa some months before admission to hospital. Vaginitis treated. Pain in both ovarian regions, rapidly growing worse. Section. Plenty of pus in ovaries and tubes. Perfect recovery.

Another (Case 34) contracted gonorrhœa from husband. In four weeks pyosalpingitis of right side, involving intestine. At time of section free pus poured out of left tube. Fimbria of right tube implanted upon intestine like a placenta; ovarian and tubal abscess. Bowel gave much anxiety, as it was badly necrosed. Gauze packing and drainage after flushing. Perfect recovery. The length of this article forbids further mention of these very interesting cases.